

Pre-Algebra Global Metrics

Mathematics And Geography · Answer Key · 15 Questions

1. The surface area of Earth is approximately 510 million square kilometers. If 71% of this is covered by water, what is the approximate area of the Earth's landmass in square kilometers?

- A) 147.9 million**
- B) 155.2 million
- C) 132.6 million
- D) 362.1 million

2. Mount Everest is 8,848 meters tall, and the Mariana Trench is 10,994 meters deep. If you stack the trench's depth onto the mountain's height, what is the total vertical distance in kilometers?

- A) 19.842 km
- B) 18.742 km
- C) 19.742 km**
- D) 18.842 km

3. The population of Tokyo is approximately 37.4 million, while the population of Australia is approximately 26 million. What is the approximate ratio of Tokyo's population to Australia's population?

- A) 1.44:1**
- B) 1.52:1
- C) 1.38:1
- D) 1.61:1

4. The Nile River is 6,650 km long. The Amazon River is 6,400 km long. By what percentage is the Nile longer than the Amazon, rounded to the nearest tenth?

- A) 3.9%**
- B) 4.2%
- C) 3.7%
- D) 4.0%

5. If the distance between London and New York is approximately 5,570 km, and a plane travels at an average speed of 850 km/h, approximately how many hours will the flight take?

- A) 6.2 hours
- B) 6.55 hours**
- C) 6.85 hours
- D) 7.1 hours

6. The Sahara Desert covers approximately 9,200,000 square kilometers. The total land area of Africa is approximately 30,370,000 square kilometers. What fraction of Africa does the Sahara cover?

- A) ~25%
- B) ~30%**
- C) ~35%
- D) ~40%

7. The world's longest border, between Canada and the United States, is 8,891 km long. If $\frac{1}{7}$ of this border is in the state of Alaska, how long is the Alaska-Canada border in km?

- A) 1,245 km
- B) 1,270 km**
- C) 1,310 km
- D) 1,295 km

8. The circumference of the Earth at the equator is 40,075 km. If you traveled at a constant speed of 100 km/h, how many days would it take to circle the globe?

- A) 16.7 days**
- B) 17.4 days
- C) 18.2 days
- D) 19.1 days

9. The Vatican City is 0.44 square kilometers. Monaco is 2.02 square kilometers. How many times larger is Monaco than the Vatican City?

- A) 4.25
- B) 4.59**
- C) 4.82
- D) 5.11

10. The speed of sound is 343 m/s. If a lightning strike occurs 10.29 km away, how many seconds will it take for the thunder to be heard?

- A) 25 seconds
- B) 30 seconds**
- C) 35 seconds
- D) 40 seconds

11. Russia's land area is 17.1 million square kilometers. The United States' land area is 9.8 million square kilometers. What is the difference in millions of square kilometers?

- A) 6.3
- B) 7.3**
- C) 8.3
- D) 9.3

12. The Gobi Desert experiences temperatures of 40°C in summer and -40°C in winter. What is the total range of temperature in this environment?

- A) 0°C
- B) 40°C
- C) 80°C**
- D) 120°C

13. If 1 inch equals 2.54 centimeters, and the world's tallest man was 272 cm tall, how tall was he in inches (rounded to the nearest whole number)?

- A) 105 inches
- B) 107 inches**
- C) 109 inches
- D) 111 inches

14. Antarctica covers 14.2 million square kilometers. If the ice sheet contains 26.5 million cubic kilometers of water, what is the average thickness of the ice in kilometers (rounded to two decimal places)?

- A) 1.87 km**
- B) 1.92 km
- C) 2.01 km
- D) 2.15 km

15. The average depth of the Pacific Ocean is 4,000 meters. The average depth of the Atlantic Ocean is 3,600 meters. What is the ratio of the Atlantic's depth to the Pacific's depth?

- A) 0.8
- B) 0.85
- C) 0.9**
- D) 0.95